National Gas Transmission

Procurement Guidelines Report

01 April 2022 – 31 March 2023

Version 1.0

national gas transmission

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1.0 Executive Summary

National Gas Transmission (NGT) has been given the discretion by Ofgem with regard to the Procurement of System Management Services, subject to an obligation under National Gas's Transporter Licence to operate the system in an efficient, economic and co-ordinated manner, and taking into account the GT (Gas Transmission) incentives.

NGT confirms that System Management Services during the period covered by this report has been procured in accordance with the principles set out in the prevailing Procurement Guidelines, and therefore NGT considers that such activities satisfy its relevant Licence obligations.

2.0 Introduction

2.1 Purpose of the Document

This document sets out the Procurement Guidelines ("the Guidelines") which NGT is required to maintain, in accordance with Special Condition 9.19, System Management Services (the Special Condition) of the NGT plc, Gas Transporter Licence (the Licence). The purpose of the Guidelines is to provide information on the System Management Services and tools that NGT may procure in relation to its System Management role. The Guidelines cannot cover every possible situation that NGT may encounter. They represent a generic statement of the procurement principles and tools that the company will use in respect of gas, energy and/or capacity management.

Unless defined in the Guidelines, capitalised terms used herein shall have the same meanings given to them in the Licence or the Uniform Network Code (UNC). Where statutory obligations or the provisions of the UNC are considered inconsistent with any part of these Guidelines, then the relevant statutory obligation and/or UNC provision will take precedence.

The latest version of this document is available electronically from:
https://www.nationalgas.com/about-us/how-were-regulated/gas-industry-compliance

Or from:

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2.2 Reporting Period

The report includes details of System Management Services procured in relation to the gas flow period 1 April 2022 to 31 March 2023 inclusive.

This reporting period covers the last month of the Storage Year 2021/2022 (April 2022) and the majority of Storage Year 2022/2023 (May 2022 to March 2023).

3.0 Procurement of System Management Services

Special Condition 9.19 of NGT's GT Licence defines the System Management Services as the "services in relation to the balancing of gas inputs to and gas off takes from the National Transmission System (NTS) and includes balancing trades and balancing trade derivatives and constraint management services".

Table 1 summarises the System Management Services required for the following applications; These are: -

1. Operating Margins
2. System Operation
3. Shrinkage
4. Contingency Procurer of Supplier Demand
5. Entry Capacity Management
6. Exit Capacity Management
7. Gas Balancing
8. Demand Side Response

4.0 System Management Services Procured

The services National Gas procured in this period are summarised below;

4.1 Operating Margins (OM)

The purpose of an OM system management service is to ensure operational balancing capability in the event of a supply failure, demand forecast change or plant failure whilst markets react. In addition, a quantity of OM is held in reserve to manage the orderly run-down of the system in an emergency.

Service Component	Component Description and Details
Holdings Contracts (Capacity and Deliverability Arrangements)	NGT (OM) procured this service at the following facilities: **Storage facilities:** ▪ Aldbrough ▪ Hill Top Farm ▪ Holford ▪ Hornsea ▪ Humbly Grove ▪ Stublach **Delivery arrangements:** ▪ Milford Haven ▪ Grain LNG ▪ Power Stations

Service Component Description and Details			
Holdings Contracts (Capacity Arrangements) **For the period 1 April 2022 – 31 March 2023, NGT procured OM as follows:**			
Month	**Contract Type**	**Space (kWh)**	**Average Unit cost (p/kWh/annum)**
Apr-22	Capacity Contracts	294,281,877	1.5203
May-22 to Mar-23	Capacity Contracts	333,846.462	1.4434
Holdings Contracts (Delivery Arrangements)			
For the period 1 April 2022 – 31 March 2023, NGT procured OM as follows:			
Month	**Contract Type**	**OM Deliverability (kWh/d)**	**Average Price (p/kWh/d/annum)**
Apr-22	Delivery Contracts	544,316,964	1.5172
May-22 to Nov-22	Delivery Contracts	534,790,461	1.2133
Dec-22 to Mar-23	Delivery Contracts	654,910,461	4.7651
Service Component Description and Details			

Gas Procurement

OM utilises this service to address an OM gas deficit at a given storage facility where NGT holds Operating Margins Capacity Arrangements. OM may source required gas by injecting gas that has been withdrawn from storage facilities with an OM gas surplus, or through a market tender process or through our trading desk.

Delivery Month	In-store quantity (kWh)	NBP quantity (kWh)	In-store weighted average price (p/kWh)	NBP weighted average price (p/kWh)
June 2022	0	39,564,585	N/A	5.2456

Gas Disposal	**For the period 1 April 2022 – 31 March 2023, no OM gas was disposed.**
OM Transfer between Storage Facilities	NGT (OM) utilises this service to address a gas-in-store surplus or deficit by transferring OM gas between Storage Facilities. **For the period 1 April 2022 – 31 March 2023, NGT transferred 26,376,390 kWh of OM Gas between Storage Facilities.**
OM Utilisation	NGT (OM) utilises Operating Margins services to ensure Operational Balancing capability in the event of a supply failure, demand forecast change or plant failure. **For the period 1 April 2022 – 31 March 2023, there was no OM utilised.**

4.2 System Operation

The purpose of the System Operation is to ensure Standard Contracts are set up to provide operational balancing capability in the event of a supply failure, demand forecast change or plant failure. NGT may develop further services or enter into contracts that will enable it to better manage its operational and commercial risks.

The standard contracts are;

- **Network Entry Agreement (NEA)** – contains Network Entry Provisions and Local Operating Procedures which specify the terms, conditions and requirements to allow the delivery of gas to the network.
- **Network Exit Agreement (NExA)** – contains Network Exit Provisions and Local Operating Procedures which specify the terms, conditions and requirements to allow the offtake of gas from the network.
- **Interconnection Agreement (IA)** – contains Network Entry/Exit Provisions and Local Operating Procedures which specify the terms, conditions and requirements to allow both the delivery of gas to the network and the offtake of gas from the network.
- **Storage Connection Agreement (SCA)** – contains Network Entry/Exit Provisions and Local Operating Procedures which specify the terms, conditions and requirements to allow both the delivery of gas to the network and the offtake of gas from the network.
- **OAD Supplemental Agreement** – contains the terms, conditions and requirements to allow the offtake of gas from the network by a Distribution Network Operator.

Service Component Description and Details	
Standard Contracts (e.g. NEA, NExA, IA, SCA)	**During the period 1 April 2022 – 31 March 2023, NGT did not procure standard contracts for day to day system operation.**

4.3 Shrinkage

The NTS Shrinkage Provider manages the risk exposure associated with the shrinkage account. Shrinkage covers own use energy (to run compressors), CV shrinkage associated with variations in the calorific value of gas, and unaccounted for gas (meter error, data error, venting). The account is subject to normal cash-out arrangements if the daily gas quantities purchased do not match the daily shrinkage output allocations.
NGT manages this service by trading gas at the National Balancing Point (NBP).

Service Component Description and Details						
NBP Trades	**For 1 April 2022 – 31 March 2023, NGT procured NTS shrinkage via NBP trades as follows:**					
Month	**Total Quantity Purchased (kWh)**	**Purchase Cost (£)**	**Weighted Average Purchase Price (p/kWh)**	**Total Quantity Sold (kWh)**	**Sell Revenue (£)**	**Weighted Average Sell Price (p/kWh)**
Apr-22	501,649,631	33,465,966	6.6712	0	0	0.0
May-22	825,405,164	30,929,661	3.7472	615,449	16,806	2.7307
Jun-22	813,506,482	41,607,520	5.1146	1,377,434	68,644	4.9834
Jul-22	611,668,484	41,833,246	6.8392	0	0	0.0
Aug-22	474,775,020	47,780,450	10.0638	439,607	42,975	9.7758
Sep-22	460,473,155	48,453,653	10.5226	0	0	0.0
Oct-22	442,918,202	57,092,871	12.8902	2,989,324	187,560	6.2743
Nov-22	553,376,662	62,196,816	11.2395	0	0	0.0
Dec-22	635,934,763	81,392,602	12.7989	1,523,969	89,960	5.9030
Jan-23	545,199,981	66,082,835	12.1208	3,751,309	206,835	5.5137
Feb-23	462,641,881	53,912,499	11.6532	0	0	0
Mar-23	390,868,793	53,108,761	13.5874	29,307,100	983,750	3.3567

Service Component Description and Details						
Imbalance Cash-out	**From 1 April 2022 – 31 March 2023, NGT's imbalance cash-out for the NTS shrinkage account was as follows:**					
Month	**Total Quantity Purchased (kWh)**	**Purchase Cost (£)**	**Weighted Average Purchase Price (p/kWh)**	**Total Quantity Sold (kWh)**	**Sell Revenue (£)**	**Weighted Average Sell Price (p/kWh)**
Apr-22	16,885,045	1,110,390	6.5762	7,141,544	302,947	4.2420
May-22	23,285,002	939,543	4.0350	5,102,944	195,441	3.8300
Jun-22	20,651,035	1,145,915	5.5489	8,443,236	290,221	3.4373
Jul-22	13,349,495	1,284,101	9.6191	5,477,760	408,700	7.4611
Aug-22	17,168,027	2,651,385	15.4437	5,502,997	525,457	9.5486
Sep-22	41,567,492	4,253,060	10.2317	27,776	2,246	8.0868
Oct-22	20,442,426	692,502	3.3876	2,867,842	158,692	5.5335
Nov-22	39,765,695	2,010,962	5.0570	717,193	24,193	3.3733
Dec-22	11,569,902	1,327,882	11.4770	7,671,948	554,538	7.2281
Jan-23	5,588,968	323,176	5.7824	6,217,584	327,515	5.2676
Feb-23	13,130,852	614,354	4.6787	2,124,671	98,455	4.6339
Mar-23	8,075,235	330,080	4.0876	4,714,253	173,299	3.6761

4.4 Contingency Procurer of Supplier Demand

The purpose is to enable NGT to procure gas to meet any shipperless supplier demand, this situation occurs if the supplier's shipper has been terminated in accordance within the provisions of UNC. In the absence of revised shipping arrangements the supplier(s) associated to that shipper may operate under a 'Deed of Undertaking' (DoU), resulting in the supplier becoming liable for all the energy balancing and transportation charges that would otherwise have been paid by the shipper. The absence of a shipper, all other things being equal would create a short system where outputs from the system are greater than the inputs, as the supplier itself has no means of delivering gas onto the system.

Service Component Description and Details	
Contingency Procurer Of Supplier Demand	**During the period 1 April 2022 – 31 March 2023, NGT did not procure any gas to meet this demand.**

4.5 Entry Capacity Management

The purpose of an entry capacity management service is to enable NGT to efficiently manage firm NTS entry capacity rights. Entry capacity holdings may need to be reduced to either efficiently manage capacity risk exposure or to reduce holdings, and thereby manage flows onto the system. NGT may buyback firm NTS entry capacity from Users via the Gemini entry capacity system or it may enter into Capacity Management Agreements (CMAs). NGT may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component Description and Details					
Buybacks on Gemini	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**				
Month	**ASEP**	**No. of days on which offers accepted**	**No. of offers accepted**	**Quantity accepted (kWh)**	**Weighted average price (p/kWh)**
Apr-22	None	0	0	0	0
May-22	None	0	0	0	0
Jun-22	None	0	0	0	0
Jul-22	None	0	0	0	0
Aug-22	None	0	0	0	0
Sep-22	None	0	0	0	0
Oct-22	None	0	0	0	0
Nov-22	None	0	0	0	0
Dec-22	None	0	0	0	0
Jan-23	None	0	0	0	0
Feb-23	None	0	0	0	0
Mar-23	None	0	0	0	0

Service Component Description and Details			
CMAs – Options Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**		
Month	**ASEP**	**Total Quantity Accepted (kWh)**	**Cost of Option (£)**
Apr-22	None	0	0
May-22	None	0	0
Jun-22	None	0	0
Jul-22	None	0	0
Aug-22	None	0	0
Sep-22	None	0	0
Oct-22	None	0	0
Nov-22	None	0	0
Dec-22	None	0	0
Jan-23	None	0	0
Feb-23	None	0	0
Mar-23	None	0	0

Service Component Description and Details			
CMAs – Forwards Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**		
Month	**ASEP**	**Quantity utilised (kWh)**	**Total Cost of Forward Buybacks (£)**
Apr-22	None	0	0
May-22	None	0	0
Jun-22	None	0	0
Jul-22	None	0	0
Aug-22	None	0	0
Sep-22	None	0	0
Oct-22	None	0	0
Nov-22	None	0	0
Dec-22	None	0	0
Jan-23	None	0	0
Feb-23	None	0	0
Mar-23	None	0	0

Service Component Description and Details				
CMAs – Options Utilisation	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**			
Month	**ASEP**	**Quantity utilised (kWh)**	**Total Cost of utilisation (exercise) (£)**	**No. of days on which option exercised**
Apr-22	None	0	0	0
May-22	None	0	0	0
Jun-22	None	0	0	0
Jul-22	None	0	0	0
Aug-22	None	0	0	0
Sep-22	None	0	0	0
Oct-22	None	0	0	0
Nov-22	None	0	0	0
Dec-22	None	0	0	0
Jan-23	None	0	0	0
Feb-23	None	0	0	0
Mar-23	None	0	0	0

Service Component Description and Details	
Flow Management Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**
Month	**Total Cost (£)**
Apr-22	0
May-22	0
Jun-22	0
Jul-22	0
Aug-22	0
Sep-22	0
Oct-22	0
Nov-22	0
Dec-22	0
Jan-23	0
Feb-23	0
Mar-23	0

4.6 Exit Capacity Management

The purpose of an exit capacity management service is to enable the system to accommodate gas flows in accordance with Users' firm NTS exit capacity rights. In the event of desired exit flows exceeding capability, NGT may procure a range of demand/supply side services in order to achieve the desired changes in gas flows. NGT may buyback firm NTS exit capacity from Users via the Gemini exit capacity system or it may enter into Capacity Management Agreements (CMAs), to manage NTS exit constraints and/or Network Gas Supply Emergencies. NGT may develop further services or enter into contracts that will enable it to better manage both its operational and commercial risks.

Service Component Description and Details					
Buybacks on Gemini	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**				
Month	**ASEP**	**No. of days on which offers accepted**	**No. of offers accepted**	**Quantity accepted (kWh)**	**Weighted average price (p/kWh)**
Apr-22	None	0	0	0	0
May-22	None	0	0	0	0
Jun-22	None	0	0	0	0
Jul-22	None	0	0	0	0
Aug-22	None	0	0	0	0
Sep-22	None	0	0	0	0
Oct-22	None	0	0	0	0
Nov-22	None	0	0	0	0
Dec-22	None	0	0	0	0
Jan-23	None	0	0	0	0
Feb-23	None	0	0	0	0
Mar-23	None	0	0	0	0

Service Component Description and Details			
CMAs – Options Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**		
Month	**ASEP**	**Total Quantity Accepted (kWh)**	**Cost of Option (£)**
Apr-22	None	0	0
May-22	None	0	0
Jun-22	None	0	0
Jul-22	None	0	0
Aug-22	None	0	0
Sep-22	None	0	0
Oct-22	None	0	0
Nov-22	None	0	0
Dec-22	None	0	0
Jan-23	None	0	0
Feb-23	None	0	0
Mar-23	None	0	0

Service Component Description and Details			
CMAs – Forwards Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**		
Month	**ASEP**	**Quantity utilised (kWh)**	**Total Cost of Forward Buybacks (£)**
Apr-22	None	0	0
May-22	None	0	0
Jun-22	None	0	0
Jul-22	None	0	0
Aug-22	None	0	0
Sep-22	None	0	0
Oct-22	None	0	0
Nov-22	None	0	0
Dec-22	None	0	0
Jan-23	None	0	0
Feb-23	None	0	0
Mar-23	None	0	0

Service Component Description and Details				
CMAs – Options Utilisation	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**			
Month	**ASEP**	**Quantity utilised (kWh)**	**Total Cost of utilisation (exercise) (£)**	**No. of days on which option exercised**
Apr-22	None	0	0	0
May-22	None	0	0	0
Jun-22	None	0	0	0
Jul-22	None	0	0	0
Aug-22	None	0	0	0
Sep-22	None	0	0	0
Oct-22	None	0	0	0
Nov-22	None	0	0	0
Dec-22	None	0	0	0
Jan-23	None	0	0	0
Feb-23	None	0	0	0
Mar-23	None	0	0	0

Service Component Description and Details	
Flow Management Agreements	**For the period 1 April 2022 – 31 March 2023, NGT procured these services as follows:**
Month	**Total Cost (£)**
Apr-22	0
May-22	0
Jun-22	0
Jul-22	0
Aug-22	0
Sep-22	0
Oct-22	0
Nov-22	0
Dec-22	0
Jan-23	0
Feb-23	0
Mar-23	0

4.7 Gas Balancing

The purpose of a gas balancing system management service is to enable NGT, either acting in its role as residual system balancer to balance the gas inputs to and offtakes from the NTS within acceptable levels, or for the purposes of localised system management.

Service Component Description and Details
NGT trades on the ICE Index On-the-day Commodity Market (OCM) day ahead and/or within day to resolve imbalances. OCM trades are deployed to achieve both national system balance and to meet localised requirements. For national system requirements, NGT can trade in all three OCM markets i.e. physical, title and locational. For localised requirements, NGT only trades in the locational market. **During the period 1 April 2022 – 31 March 2023, NGT carried out the following OCM trades:**

OCM 'Title' trades to address a National Requirement : National 'NBP Title' Trades

Month	No of Days on Which Trades Accepted	Number of Trade Buys	Number of Trade Sells	Quantity Purchased (kWh)	Quantity Sold (kWh)	Purchase Cost (£)	Sell Revenue (£)
Apr-22	25	47	319	110,341,235	667,879,517	7,988,938	36,435,899
May-22	22	26	297	50,056,527	512,200,207	2,314,206	15,899,870
Jun-22	20	82	199	175,989,139	393,828,817	8,899,859	11,455,100
Jul-22	17	13	215	23,592,218	372,288,101	2,149,989	22,682,961
Aug-22	25	57	162	109,081,028	314,728,955	15,183,234	39,746,743
Sep-22	21	82	214	156,998,138	390,077,519	13,525,332	30,131,500
Oct-22	26	188	202	365,313,008	428,059,520	21,037,927	4,764,245
Nov-22	20	106	101	243,717,852	195,390,443	19,878,632	5,855,127
Dec-22	26	170	330	343,567,141	710,843,724	35,376,075	56,931,364
Jan-23	23	288	67	583,006,165	139,238,033	34,741,696	7,051,273
Feb-23	21	159	137	292,748,628	288,059,492	15,314,208	12,452,249
Mar-23	27	222	195	434,214,006	423,956,515	16,836,126	16,183,791

Service Component Description and Details									
OCM 'Physical' trades to address a National Requirement									
Month	**No. of days on which trades accepted**	**No. of Trade buys**	**No. of Trade sells**	**Quantity Purchased (kWh)**	**Quantity Sold (kWh)**	**Purchase cost (£)**	**Sell revenue (£)**	**Weighted Average Purchase Price (p/kWh)**	**Weighted Average Sell Price (p/kWh)**
No OCM Physical trades were conducted in this period to address a National Requirement.									

Service Component Description and Details									
OCM 'Locational' trades to address a National Requirement									
Month	**No. of days on which trades accepted**	**No. of Trade buys**	**No. of Trade sells**	**Quantity Purchased (kWh)**	**Quantity Sold (kWh)**	**Purchase cost (£)**	**Sell revenue (£)**	**Weighted Average Purchase Price (p/kWh)**	**Weighted Average Sell Price (p/kWh)**
No locational trades were conducted in this period to address a National Requirement.									

Service Component Description and Details									
OCM 'Locational' trades to address a Localised Requirement									
Month	**No. of days on which trades accepted**	**No. of Trade buys**	**No. of Trade sells**	**Quantity Purchased (kWh)**	**Quantity Sold (kWh)**	**Purchase cost (£)**	**Sell revenue (£)**	**Weighted Average Purchase Price (p/kWh)**	**Weighted Average Sell Price (p/kWh)**
Jan-23	1	3	4	19,342,686	44,546,792	£1,440,008.46	£1,438,984.47	7.44	3.23

4.8 Demand Side Response (DSR)

Demand Side Response arrangements provide a mechanism for large consumers of gas to offer to voluntarily reduce their gas demand in return for a compensation payment, which they define, during times of system stress. DSR aims to reduce the likelihood, severity and duration of a gas supply emergency.

<table>
<tr><th colspan="10">Service Component Description and Details</th></tr>
<tr><th colspan="10">Gas Demand Side Response Trades</th></tr>
<tr><th>Month</th><th>No. of days on which trades accepted</th><th>No. of Trade buys</th><th>No. of Trade sells</th><th>Quantity Purchased (kWh)</th><th>Quantity Sold (kWh)</th><th>Purchase cost (£)</th><th>Sell revenue (£)</th><th>Weighted Average Purchase Price (p/kWh)</th><th>Weighted Average Sell Price (p/kWh)</th></tr>
<tr><td colspan="10">No Gas Demand Side Response trades were taken.</td></tr>
<tr><td>Demand Side Response (DSR)</td><td colspan="9">Following the implementation of the UNC Modification Proposal 0822, NGT entered Option contracts for a DSR service to be available between 11th January 2023 – 30th April 2023, however this report only covers the period up until the 31st March 2023. In this period, no DSR arrangements were exercised.
<table>
<tr><th>Provider</th><th>Reduction (kWh) per day</th><th>Number of days (11th January – 31st March 2023)</th><th>Option Price (p/kWh/day)</th><th>Sum of Option Cost (£)</th></tr>
<tr><td>1</td><td>100,000</td><td>80</td><td>3.30</td><td>264,000</td></tr>
<tr><td>2</td><td>2,000,000</td><td>80</td><td>0.5</td><td>800,000</td></tr>
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